

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the following discussion, is respectfully requested.

Claims 2-11, 13, 14, 17 and 18 are pending, of which Claims 2-11, 13, 14, 17 and 18 are active; and no claims are amended, newly added, or canceled herewith.

In the outstanding Office Action, Claims 2-11 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement; Claim 18 was rejected under 35 U.S.C. 102(b) as anticipated by Wallentin (U.S. Pat. No. 6,246,878); Claim 17 was rejected under 35 U.S.C. 103(a) as unpatentable over Wallentin in view of Jiang (U.S. Pat. No. 6,725,040); and Claims 13 and 14 are indicated as allowable.

Initially, Applicants gratefully acknowledge the early indication of the allowable subject matter in Claims 13 and 14.

Further, Applicants and Applicants' representatives thank Examiner Aijbade-Akonai for the courtesy of the interview conducted on July 20, 2006. During the interview, the §112, first paragraph, rejection, as well as, differences between the inventions of the rejected independent claims and the applied reference were discussed. The following remarks set forth the discussed differences.

Before turning to the outstanding rejections, it is believed that a brief review of the present invention would be helpful.

In this regard, the present invention describes a radio data communications method in which at least one of a first radio network controller and a second radio network controller performs a soft handover process for allowing soft handover of a mobile terminal, when the mobile terminal is performing the soft handover.

In a non-limiting example, shown in Figure 4 the method includes changing radio network controllers (RT and AR) that perform the soft handover process and transmitting

data as part of the soft handover process in downlink radio data communications in which the first radio network controller (RT) transmits data to the mobile terminal (MN) via the second radio network controller (AR) and a base station (AP).

Further, the soft handover processing includes determining a first transmission timing of transmitting the data to all base stations (AP) to which the mobile terminal (MN) is connected when performing the soft handover. Additionally, the soft handover includes determining a second transmission timing of transmitting the data to the second radio network controller (AR). Further the data is divided from L3 to L2 frame format and a sequence number is provided to each of the L2 data fragments based on a sequence number providing status. The data fragments are then transferred to all the base stations (AP) at the first transmission timing. Then at least a data fragment is transmitted to the second radio network controller (AR) where the data fragment is added with information requesting the sequence number providing status. Finally, the sequence number providing status is transferred from the second radio network controller (AR) to the first radio network controller (RT), where the sequence number providing status includes the number of data fragments having been transmitted since the data fragment was added with information requesting the sequence number providing status.

Turning now to the §112 rejection in the outstanding Office Action, Applicants traverse that rejection for at least the following reasons.

As discussed in the interview, the specification, as originally filed, recites from page 23, line 21 to page 24, line 9,

When control point change information (notification) instructing the first radio network controller (e.g., the router RT 2) to operate as an uppermost control point is received, the data dividing unit 36 provided in the first radio network controller (e.g., the router RT 2) divides downlink data in L3 frame format into data fragments in L2 frame format. When control point change information (notification) instructing the router

not to operate as a control point is received, the data dividing unit 36 stops the data dividing process.

When control point change information (notification) instructing the router to operate as an uppermost control point (the first radio network controller) is received, **the sequence number providing unit 37 provides a sequence number to each data fragment (in L2 frame format) based on the sequence number providing status.** When control point change information (notification) instructing the router not to operate as a control point is received, the sequence number providing unit 37 stops the sequence number providing process.

The outstanding Office Action, states on page 2, item 3 that “the newly added limitation of “based on a sequence number providing status” is not adequately supported by the original specification and constitutes new matter.” However, as clearly noted above the original specification describes that a sequence number is provided to each of the data fragments based on a sequence number providing status.

In other words, the data in the L3 frame format is divided into fragments in the L2 frame format and then the sequence number providing unit provides a sequence number to each data fragment (now in L2 data format) based on the sequence number providing status.

Accordingly, Applicants respectfully request the rejection of Claims 2-11 under 35 U.S.C. 112, first paragraph, be withdrawn.

Turning now to the rejection of Claims 17 and 18 under §102 and §103, Applicants respectfully traverse those rejections.

Claim 17 recites, in part,

a selective combiner configured to perform selective combining of data fragments from all base stations to which the mobile terminal is connected when performing the soft handover, in response to the notification, wherein the selective combining is performed at least according to the sequence number in each of the data segments;

Claim 18 recites analogous features.

As discussed in the interview, Wallentin describes a cellular system including a radio network controller and a combining operation.<sup>1</sup> However, Wallentin does not describe or suggest a selective combiner configured to perform selective combining of data fragments from all base stations to which the mobile terminal is connected when performing the soft handover, in response to the notification, as is recited in Claim 17 and similarly in Claim 18.

In other words, Wallentin describes that the same frame is sent to several base stations from a mobile device. Further, when receiving a new frame the frame selector waits for a specified time for the reception of the other matching frames. Once the other frames arrive the frames are combined and the best frame is selected and the other frames are discarded.<sup>2</sup> In contrast, Claims 17 and 18 describe that the selective combiner is configured to selectively combine the data fragments from all the base stations to which the mobile terminal is connected in response to a notification; the notification being a notice instructing the radio network controller to perform the soft handover process as a first radio network controller. Wallentin describes that the combination is preformed as a result of receiving matching frames, while Claims 17 and 18 describes that selective combination is preformed in response to a notification. Additionally, Jiang does not cure the above noted deficiencies of Wallentin.

Therefore, Applicants respectfully submit that Claims 17 and 18 patentably distinguish over Wallentin and Jiang considered alone or in any proper combination.

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<sup>1</sup> Wallentin, col. 9, lines 61-62.

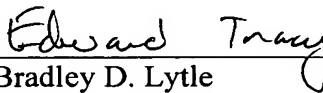
<sup>2</sup> Wallentin, col. 10, lines 8-22.

Additionally, Applicants respectfully request that the IDS, filed January 13, 2006, be acknowledged.

Consequently, in light of the above discussion and in view of the present amendment, the application is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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